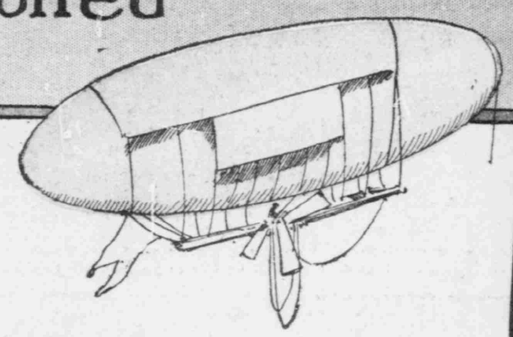
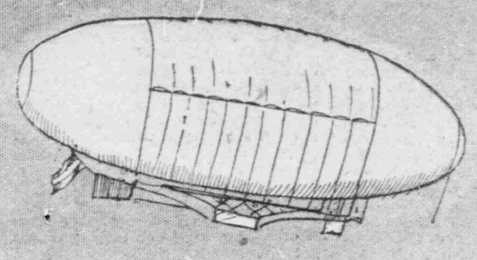
THE WAR EYE OF FRANCE

From Eiffel Tower Armies and Fleets of the Republic Are to Be Directed and Controlled





A GIGANTIC war eye, that will sweep the whole of France—her frontiers, her chains of fortresses and her seaboard—such is to be the further mission of the famous Eiffel Tower, of Paris.

This structure, erected as the chief curiosity of the Paris Exposition, has outlived its usefulness in other respects, and has been made the central point of the great wireless signal system of the French army and navy.

From the top of the tower, which is 984 feet from the ground, officials of the army may direct military operations in any part of the Republic, and even for considerable distances over the frontier in adjoining countries. Its naval fleets in the Mediterranean, the Bay of Biscay, the English Channel, the North Sea or the Baltic will be in constant touch with the directing authorities in Paris.

Should France and England become allies in some future conflict, direct communication with London can be maintained from the Eiffel Tower. Southward from it waves of warning and command will float into Algeria and Tunis. From this remarkable tower may issue orders that will change the map of Europe.

Lift up your eyes and behold them that come from the North.—Jer., xiii, 20.

DURING the army manoeuvres last fall the various corps were directed from the new station. Later, fleet movements in the English channel and the Mediterranean were ordered without a hitch in the same way.

Quite recently the scope of communication from the tower has been extended, so that now messages are exchanged with London and Berlin on the one side, and with Tunis and Algiers, on the African coast, on the other.

The work of equipping it for signal purposes is now going on, and it is expected to install there the most complete system of wireless telegraphy in the world.

The French are pleased with the idea of retaining the architectural curiosity, and their vanity is tickled by the plan to make it the most wonderful war eye on the globe.

Indeed, the enthusiastic people confidently expect, in a short time, to see airships arriving at and departing from this great steel stem—an airship station nearly 1000 feet above earth.

Built by the famous engineer, Gustave Eiffel, the tower was completed in March, 1889, in time to serve as one of the notable features of the exposition of that year. It was the leading attraction of that big show, and has never since ceased to draw visitors and coin.

It cost considerably over $1,000,000 to build the tower, for which 7000 tons of metal were used. Of the cost, $292,000 was voted by the government, while the engineer supplied the rest. The profits for 1889 alone nearly paid the cost.

Some idea of its height—984 feet—may be gained from a comparison with other structures of the world. The Washington Monument, at Washington, D. C., is 555 feet tall; the broad-brimmed hat of William Penn, on Philadelphia's City Hall, is 547 feet above the pavement; the dome of St. Peter's, in Rome, rises to only 448 feet, while the great pyramid of Cheops is but 486 feet high.

From the top of the Eiffel Tower on a clear day one can see about eighty-five miles. At night a searchlight from this eminence stabs the surrounding darkness.

At its base this wonderful tower covers nearly two and a half acres of ground. Its lower section consists of four built-up iron columns, each of which consists of four smaller columns, resting on masonry piers.

Springing gracefully upward, the four main columns curve toward each other until, 620 feet above the surface, they join in a single column. Above this the long needle of the tower rises 364 feet higher.

At 189 feet, at 380 feet and again at 906 feet there are platforms which are reached by elevators, as well as by stairs.

From the highest platform a winding stairway climbs to the very pinnacle of the structure, but this part has never been open to the public.

When these different platforms are converted into airship stations, the French will, indeed, possess a novelty of which they may be proud.

They are daring enough to attempt almost anything. A few years ago the government settled, in a startling way, a difference of opinion between the Minister of Marine and the Naval Board of Construction.

M. Pelletan, the Minister, thought modern battleships were being made in too complicated and delicate a fashion. The maze of electrical wires and other machinery upon which the working of the turrets depended would be put out of commission, he argued, by the impact of a heavy shell.

"It is impossible to build a floating fortress like a watch," he declared.

"Well," retorted the other authorities. "there is a way to settle the matter; if you will order a test we shall see who is right."

So, to the amazement of France—of the world, in fact—the new battleship Suffren, pride of the navy, was ordered out for the test; to be fired upon by a sister ship.

Just outside the picturesque harbor of Brest she was anchored, her decks cleared for action. To within a few hundred yards of her steamed the big battleship Massena, which let go, full and fair at the other, with one of her twelve-inch guns.

The great shell struck the Suffren's turret squarely, rebounded, and burst into fragments. A large black splotch appeared on the turret—that was all the damage apparent.

Whatever damage was done to the mechanism of the turrets was never made public, but two sheep that had been imprisoned in the turrets were not injured.

So, when the French complete the equipment of the Eiffel Tower as the eye and brain of their military operations, they will doubtless have some startling innovation to present.

Upon a peace footing the French army consists of about 550,000 men; the total war strength of the nation is figured at something over 4,600,000.

Were the armies of France to invade Germany, England or Italy, they could be directed by the Eiffel Tower station far into those countries—to the capitals of England and Germany, did they succeed in getting that far.

But if the main duty were defense of the republic's home territory, the wireless service would probably be even better, as more or less permanent stations could be erected along the line of frontier fortifications from which to communicate with Eiffel.

When the new frontier line was drawn by Germany after the war of 1870, it was so arranged that all the strongest positions should fall on the German side of the line. France's first line of defense stands back from the frontier, at Verdun, Toul, Belfort and Besancon.

The defenses of Paris are fifty miles away from the city, extending around it in a circle of fortifications so that an invading army—the Germans, for example—even after overcoming the first line of defense would have to break through this inner ring.

For that reason there will never be another siege of Paris in the same sense as the last one. Should an enemy get past the fifty-mile chain of forts there would be no other obstacle in marching upon the city.

Here, then, is the necessity for a vigilant war eye at the capital overlooking all the military area within the frontiers.

The army corps at Nancy would undoubtedly bear the first shock of a German advance; every turn of the tide of conflict must be known at once to Paris, so that the other corps could be promptly moved like men on a chessboard.

In a similar way the fleets under the tricolor could be moved. France's great navy would be cemented into a mobile and effective whole. She has in active service 557 fighting ships of all kinds and 257 other vessels.